

STANDARD FORM NO. 64

~~SECRET~~~~CONFIDENTIAL~~*Office Memorandum* • UNITED STATES GOVERNMENT

TO : The Files

DATE: 20 October 1957

FROM :

SUBJECT: RD-85, Task Orders 2 and 3 - XG-1355 -

1. General - A visit was made to the [redacted] in [redacted] Connecticut on 25 October 1957 with respect to matters pertaining to the subject contracts. Present were:

[redacted]
R+D-EP

2. Faulty Equipment - The following RS-11/series equipment was returned to the contractor for repair:

Receivers	Serial No.	Defect
RR/A-11	No. 922A	Dial mechanism - Faulty boards
RR/A-11	No. 926A	Dial mechanism
RR/A-11	No. 923A	Poor sensitivity
RR/B-11	No. 921B	Poor sensitivity
RR/B-11	No. 922B	Band Switch on HF position.

Transmitters	Serial No.	Defect
RT/A-11	No. 924A	Contact broken off T/R Switch
RT/A-11	No. 917A	Intermittent loading Switch
RT/B-11	No. 919B	Low Output - Missing Ground Terminal
RT/B-11	No. 926B	No Power Output

In fairness to [redacted] it should be noted that Receivers serial No. ~~923A~~ 923A and 921B, had new switches installed by the laboratory and the sensitivity may have been impaired by the mechanical switch installation. It was found that unit No. 923A had an IF board improperly seated and unit No. 921B required alignment. Both units were restored to a nominal 7 microvolt AM sensitivity and accepted for further laboratory checks. With respect to the other defects there was nothing that [redacted] engineers could say. Although the company maintained that all equipment was completely checked prior to shipment, and their engineering notebooks did have pages of individual receiver and transmitter measurements, it does not appear to be the case, especially when a ground terminal is missing. The company agreed to repair all equipment, make all

~~SECRET~~~~CONFIDENTIAL~~

~~SECRET~~

CONFIDENTIAL

necessary tests, and re-deliver by air express in about a week.

3. Dial Mechanism - We've had considerable difficulty with the dial tape drive mechanism and several modifications have been made in an attempt to improve reliability. [] comment on the latest tape drive mechanism failure was believed due to the dial tape being a fraction of an inch too long.

25X1

4. RP-11 Power Supplies - 1 RP-11 Power Supply (Serial No. 919P) was returned to the contractor. The need for redesign of the 1.25 volt filament supply to provide a minimum of 1.1 volts when the AC source is equal to the low end of any tap was explained. The unit was set up and measurements made in order to check the accuracy of [] test equipment. The filament voltage measured .9 which agrees with laboratory measurements. [] admitted that she knew the filament voltage could not fall below 1.1. (A statement to this effect is written in the Instruction Book). The company asked for time to study the problem and would phone their findings.

25X1

25X1

5. Personnel - [] is a new employee at [] and my talks with him were very encouraging. He will head up the engineering department. [] is an elderly man, confined to a wheel chair, but it is felt that he will provide senior engineering supervision that has long been lacking at []

25X1

25X1

25X1

6. Capacitor - [] has been designing experimental capacitors with a Teflon dielectric. A one mil thickness of Teflon between plates increases the capacity by a factor of four and provides a 1000 volt breakdown voltage. (If I remember correctly it takes 25,000 volts to break down 1 inch of dry air). And of course since capacity varied inversely as the plate separation, reducing the plate separation by one half doubles the capacity. Thus it is possible to design very compact high capacity variable condensers, which is what we need, for miniaturized agent equipment. [] would like to visit [] in the near future and the undersigned suggested that he bring sample variable condensers.

25X1

25X1

25X1

~~SECRET~~

CONFIDENTIAL